

# Andy K. Barrows

Frontend Lead with a DevOps / security background. B.S. in Informatics and Cybersecurity from U. of Washington.

## Professional Experience

### Certara

**Engineering Lead, Certara A.I.** 2023

- Lead engineer for Certara A.I, a SaaS that generates medical research by leveraging LLMs (GPTs) trained against scientific literature & clinical data.
- Technologies: Typescript, React, Python, SciKit, Llama, Falcon, NeoXT*

### Shopify

**Senior Software Engineer** 2021 – 2023

- Frontend lead for Linkpop, a new link-in-bio tool that uses stateless server-side components and Hydrogen to render pages near-instantaneously.
- Technologies: Typescript, React, GraphQL, Webpack, Cypress, Buildkite*

### The Washington Post

**Frontend Lead** 2020 – 2021

- Set and execute the technical direction of frontend work related to customer retention, special offers, content relevance, and personalization.
- Technologies: Typescript, React, Redux, Webpack, Cypress, Jenkins*

### Clevertech

**Senior Software Engineer, Fullstack** 2019 – 2020

- Developed award-winning cross-platform SaaS products for startups and Fortune 500 clients in the transport logistics industry.
- Technologies: Node, React, Redux, Webpack, Cypress, Docker, CircleCI*

### Crossover Health

**Software Engineer II, Frontend** 2018 – 2019

- Lead the frontend engineering team, developed core architecture, build infrastructure and UI libraries for multiple new cross-platform applications.
- Technologies: TypeScript, React, Webpack, Cypress, Docker, CircleCI*

### Capital One

**Software Engineering Intern** 2018

- Led a project team of 6 developers – providing 1:1 mentorship, system designs, and defining and implementing application architecture.
- Technologies: Go, Node, React, Webpack, Rollup, MongoDB, AWS*

### T-Mobile

**Security Engineering Co-Op** 2017 – 2018

- Developed full stack applications and data ingestion systems for cyber threat intelligence, automating the collection of emerging threat data.
- Technologies: Puppet, Ansible, Ruby, Bash, JavaScript, Node, React*

### University of Washington

**Software Engineer, Web** 2017 – 2018

- Developed a bespoke IT project management web app used to select and grant \$12 million in funding to over 100 campus projects annually.
- Technologies: Node, React, Redux, Webpack, MySQL, MongoDB, AWS*

<https://github.com/rckeller>

<https://barrfitz.com>

[andy@barrfitz.com](mailto:andy@barrfitz.com)

## Education

### University of Washington

**Bachelor of Science in Informatics and Cybersecurity**  
*Graduated March 2019; 3.7 GPA*

### Code Fellows, Seattle

**Advanced Web Development**  
*Completed January 2017*

## Skills

### Front-End Development

JavaScript ES12, TypeScript, React, Redux, MobX, GraphQL, Liquid, D3.js

### Back-End Development

Golang, Ruby, NodeJS, Express, Koa, Feathers, Restify, Adonis, Micro

### Build Infrastructure / Tooling

Babel, Webpack, Rollup, Vite, Turbo

### Testing & Quality Assurance

Jest, Cypress, Playwright, Mocha, Chai

### DevOps & CI/CD

Puppet, Ansible, Jenkins, Travis, CircleCI, Buildkite, Docker, AWS ECS

### Database Administration

MySQL Server, Postgres, MongoDB, Firestore, Redis, GraphQL & Apollo

### Penetration Testing

Burp, Nmap, Metasploit, Aircrack-ng

## Open Source

*Most recent packages:*

[@shopify/cypress-graphql](#)

Test GraphQL endpoints w/ Cypress.

[circleci-runtime-optimizer](#)

CI/CD optimization using git scm, docker caching, and more.

[cypress-react-unit-test](#)

Library for writing e2e and unit tests using the same integration test suite.